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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,144	03/03/2006	Ross Campbell McKinlay	MIDL0101PUSA	3316
22045 7590 08/31/2010 BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075				
EXAMINER HOLLOWAY, JASON R				
ART UNIT 3633		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/595,144

**Applicant(s)**

MCKINLAY ET AL.

**Examiner**

JASON HOLLOWAY

**Art Unit**

3633

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 7-13, 15-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-13, 15-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date 9 June 2010.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 June 2010 has been entered.

### ***Response to Amendment***

The previous 35 USC 112 rejections are withdrawn in light of applicant's amendments.

### ***Claim Objections***

2. Claim 1 objected to because of the following informalities:

The recitation "an open center" in line 16 should have been deleted as it was in line 3 of the claim due to it being deemed new matter in the previous rejection.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 7-8, 13, 15-18, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grether et al. (4,563,843) in view of Palmer (5,653,073).

**Regarding claims 1, 15 and 17**, Grether teaches a substantially planar insulating panel and method for constructing comprising:

a rigid frame (plastic frame 9) defining a continuous periphery of the panel (column 3 line 66 teaches the frame is constructed as a closed unit, thus it extends around the periphery of a window);

a first glass wall (pane 1; column 4 line 39 teaches glass construction for both outer panes) retained by the frame and a second glass wall (2) spaced from and opposing the first wall and together with the first wall and the frame defining an enclosed internal space of the panel (see figure); and

at least one intermediate thermal plastic insulating wall disposed in the internal space spaced from and intermediate the first and second wall members (members 5 are spaced intermediate the outer glass panels 1 and 2; column 4 lines 48-57 teaches the internal walls can be thermal plastic plates) to create a first enclosed space in the internal space between the intermediate insulating wall and the first wall and a second enclosed space in the internal space between the intermediate insulating wall and the second wall, wherein the intermediate insulating wall insulates the first wall from the second wall (see figure, multiple enclosed spaces are formed, the panels insulate the spaces from one another);

wherein the frame forms a series of parallel, spaced apart mounting surfaces arranged about an inner periphery of the frame in a manner connected by an inner wall of the frame (as clearly illustrated in the figure),

the mounting surfaces receiving and retaining the walls thereon (see figure)

and the frame further includes at least one chamber formed therein containing desiccant moisture absorption material (desiccant 17 is disposed in a chamber of the frame), the at least one chamber sealed from the first and second enclosed spaces except for perforations (bores 18 and holes 8 of the figure) in the inner wall of the frame between the mounting surfaces which are capable of allowing for the absorption of moisture from only an apposing enclosed space.

However, Grether fails to explicitly disclose the frame forms a stepwise array of mounting surfaces and wherein the walls are arranged in a cascading series such that the areas of the walls diminish sequentially in one direction from one side of the panel to the other and the walls are sequentially spaced apart from each other, the parallel, spaced apart mounting surfaces enabling walls with sequentially larger areas to be inserted into the frame one after another. Palmer teaches an embodiment of a window frame in figure 7 which teaches exactly the arrangement claimed and lacking in Grether. Therefore, from the teaching of Palmer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mounting surfaces of Grether to include a cascading arrangement similar to that of the teaching of Palmer in order to make it easier to install the panels into the frame.

**Regarding claims 2 and 18**, the combination of Grether and Palmer teaches the frame is a unitary structure formed of a series of linear segments which are miter jointed to form a continuous profile having no mechanical start or end point (see column 2 lines 1-6 of Grether; see also figure 3 of Palmer which teaches a mitered joint between two frame sections).

**Regarding claim 3**, the combination of Grether and Palmer teaches the miter joints in the frame are sealed with a bead of sealant (column 4 lines 39-49 of Palmer teaches a bead of sealant is used to form an airtight seal at the corners of the mitered joints). However, the combination of Grether and Palmer fails to explicitly disclose the joints are formed by welding. The examiner contends it would have been obvious to one of ordinary skill in the art to substitute the sealing bead used by the combination of Grether and Palmer with a weld since a weld is an obvious equivalent to the sealing bead noted in the combination. It would have been obvious to provide a weld instead of the adhesive sealing bead for the miter joints since a weld would be more structurally sound in extreme hot or cold temperatures.

**Regarding claim 7**, Grether teaches the frame profile in section has cavities adapted to provide insulation (the figure illustrates insulation 15 disposed in cavities of the frame member).

**Regarding claims 8 and 20**, Grether teaches the walls are affixed to the mounting surfaces using a rigid or semi-rigid adhesive which has either ultraviolet-setting or thermo-setting properties (see column 6 lines 9-20).

**Regarding claim 13**, the combination of Grether and Palmer teaches the frame is formed from a thermal plastics material (column 5 lines 56-62 of Grether teaches plastic construction for webs 11 and 12 of Grether, which are part of the frame. Palmer teaches plastic frame members at column 3 lines 14-16).

**Regarding claim 16**, Grether teaches the insulating walls are placed at an optimum spacing and spaced equidistant from the outer walls (as illustrated in the figure, each inner pane is equidistant from a respective outer pane, the examiner notes placing the panes at "optimum" spacing would have been obvious to one having ordinary skill in the art).

**Regarding claims 21 and 22**, the combination Grether and Palmer teaches all the limitations of the claim as applied to rejected claims 1 and 15 above including:

the frame comprising an extruded profile (see column 3 lines 14-16 of Palmer)

the cascading series of mounting surfaces also providing the frame with a multi-layered series of openings in the frame which progressively diminish in area in said one direction (via the cascading arrangement of Palmer),

which series of openings in the frame enable a procession of progressively larger of said walls, during assembly of the panel, to be inserted one after the other each directly onto one after another of said cascading series of mounting surfaces (via the cascading arrangement of Palmer).

5. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grether et al. (4,563,843) in view of Palmer (5,653,073) and further in view of Richardson et al. (5,910,083).

**Regarding claim 9**, Grether teaches the walls are affixed to the mounting surfaces via adhesive. However, the combination of Grether and Palmer fails to disclose the mounting surfaces have one or more recesses which act as traps for any excess adhesive used in affixing the walls.

Richardson teaches a spacer for a refrigerator door having a recess (ridge 104) that acts as a trap for excess adhesive (column 8 lines 61-67).

Therefore, from the teaching of Richardson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wall receiving surfaces of the combination of Grether and Palmer to include a ridge for recess as disclosed by Richardson in order to provide a passage for excess adhesive to travel.

**Regarding claim 10**, Grether teaches the first and/or second enclosed spaces are sealed and filled with air, argon gas, foam or another insulating material (the space 4 of Grether is filled with air).

6. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grether et al. (4,563,843) in view of Palmer (5,653,073) and further in view of Roche (6,401,399)

**Regarding claim 11**, the combination of Grether and Palmer fails to disclose the frame includes a gasket-retaining groove retaining a magnetized flexible sealing gasket



which provides an airtight seal between the panel and an article to which the panel is fitted. Roche teaches an openable window panel having a gasket retaining groove (via flexible magnetic strip holder 20 of Roche) which provides an airtight seal between the panel and an article to which the panel is fitted (see column 4 lines 57-65). Therefore, from the teaching of Roche, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the frame of the combination of Grether and Palmer to include an airtight magnetized seal in order to allow the window to be opened and closed easily and made capable of use in a refrigerator application.

**Regarding claim 12**, the combination of Grether, Palmer and Roche teaches the frame profile includes a keyway for insertion and mounting of a hinge (as illustrated in figures 8, 9 and 9A of Roche, a keyway via hinge pin 40 and the opening therefore is provided for the hinge connection).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1 and 15 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached 892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HOLLOWAY whose telephone number is (571) 270-5786. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian E. Glessner/  
Supervisory Patent Examiner, Art Unit 3633

JASON HOLLOWAY  
Examiner  
Art Unit 3633

JH